Solano WMA WORK PLAN
Supplemental Project
SOLANO RCD
2 YEAR CONTRACT: January 1, 2011 – December 31, 2012

Combined Contract with
Katherine Holmes, Restoration Project Manager (will receive the contract via email)
Solano Resource Conservation District
1170 North Lincoln, Suite 110, Dixon, CA 95620
707-678-1655, ext. 118 , Katherine.Holmes@ca.nacdnet.net
Joe Martinez, Solano RCD President will sign the contract.

Solano WMA Supplemental Project Proposal

WMA Supplemental Proposal COVER SHEET

Project manager contact info:
Katherine Holmes, Restoration Project Manager
Solano Resource Conservation District
1170 North Lincoln, Suite 110, Dixon, CA 95620
707-678-1655, ext. 118 , Katherine.Holmes@ca.nacdnet.net

Supplemental Executive Summary (MAX 10 lines):

We propose to eradicate red sesbania in Solano County. A county-wide survey of invasive weeds in 2004-05 identified several populations of red sesbania on the banks of the Sacramento River, Cache Slough, and Steamboat Slough. From 2006-2009, National Fish and Wildlife Foundation funding was used to conduct three annual surveys of over 42 miles of riverbank and treat (either with herbicide or manual removal) all identified red sesbania trees. There has been a steady decrease in the number of red sesbania trees found each year, and in 2009 we treated only 81 trees. We believe that with continued vigilance, we can eradicate red sesbania from the lower Sacramento River. This is a cooperative effort of the Solano Resource Conservation District (SRCD), the Natural Resources Conservation Service (NRCS), Dixon Resource Conservation District (DRCD), Solano Land Trust (SLT) and the Dixon Boat Club.

Your WMA's TOP THREE Accomplishments over the past 2 years (Max- 2 lines each):

1. We herbicide-treated 750 trees of heaven at Lake Solano County Park, including receiving environmental permits for herbicide use near elderberry shrubs.
2. We are coordinating the efforts of over 10 private landowners to control 800 acres of artichoke thistle on 15,000+ acres of rangeland, including training, chemical supply, and monitoring.
3. We held two public education meetings at which over 100 participants learned about weed identification, weed control strategies, proper sprayer calibration techniques, etc.

Supplemental Summary of Methods Used (MAX 4 lines):

Forty-two miles of river bank will be GPS surveyed for red sesbania via crews on two boats in June 2011 and June 2012. Small trees will be removed with a weed wrench. Large trees will be

cut down and the stumps treated with Aquamaster herbicide. Biomass and seed pods will be hauled to a landfill. For efficiency, surveys and treatment will be conducted at the same time.

Supplemental Summary of Net and Gross Acres:

Estimated net acres or number of plants proposed to actually treat: **100-200 trees in two years**
Gross acres or total ground proposed to survey/cover while conducting treatments: **42 linear miles of riverbank (approximately 152 acres if you assume riverbanks are ≈30 feet width)**

Estimated Total Cost per acre for proposed treatments: **$6,736/152 acres = $44.31/acre**

Supplemental Summary of In-Kind Contributions toward the Project (MAX 4 lines):

NRCS and DRCD will contribute staff time for mapping and workdays. SRCD will provide watershed coordinator time for stakeholder and WMA coordination, executive director time for project oversight, and donate chainsaw and trailer use. Dixon Boat Club will assist with workdays and donate boat use. SLT will donate boat use. In-kind match will total **$8,759**.

WMA Group: Solano County Weed Management Area

Supplemental Project Title: Project 1 – Red Sesbania Eradication

Priority Topic Area Being Addressed (from request for proposal announcement):

Priority topic area #1: ERADICATION As determined by our extensive county-wide weed survey conducted in 2004-05 (as well as follow up surveys conducted in 2006-09), the red sesbania populations in Solano County are confined to the riverbanks around Ryer Island and the town of Rio Vista (see attached map). Red sesbania is known to be an aggressive invader of riparian habitat, and eliminating these populations while they are still limited in distribution is strategically important for preventing the spread of red sesbania.

Supplemental Project Goal (6 LINES MAX):

Our goal is to GPS survey and treat (either with herbicide or manual removal) all red sesbania populations in Solano County, leading to the eradication of red sesbania from the lower Sacramento River.

What are the project's long-term benefits and/or region-wide significance (6 LINES MAX):

Red sesbania is a very aggressive invader of riparian habitat, best tackled with regional control efforts. Upstream of Solano County, populations of red sesbania are being addressed (with WMA funding) by Sacramento County Regional Parks and Placer County RCD. Fortunately, red sesbania populations are still quite limited in Solano County. Our plan is to eradicate red sesbania while its numbers are still low and prevent it from spreading further downstream into sensitive wetland habitats such as Grizzly Island and Rush Ranch.

Supplemental Project Objectives and Methods (1/2 page MAX):

Task/Objective 1: Survey 42 miles of riverbank along the Sacramento River, Cache Slough, and Steamboat Slough and take GPS readings at all red sesbania populations. Surveys will be conducted in June 2011 and June 2012.

Task/Objective 2: Treat all identified red sesbania individuals. (Treatment will be conducted at the same time as GPS surveying.) A combination of manual removal and herbicide treatment will be used. Treatment will be conducted in June 2011 and June 2012 (at the same time as the surveys.)

Task/Objective 3: Remove all red sesbania biomass, particularly the seed pods, and transport them to a local landfill. Biomass removal will be conducted in June 2011 and June 2012.

Supplemental Performance measures (¼ page max):
How will you quantitatively monitor your project? ***Distinguish between year one goals versus long term goals following treatment.*** Since this is an eradication effort, we will survey for red sesbania populations, noting the exact number of trees found each year and treating each individual. We expect that fewer (and smaller) trees will be found during the second year of the grant compared with the first year, eventually leading to complete eradication as the seed bank is depleted.